## IN THE CLAIMS

- 1. (Withdrawn) An isolated essentially mammalian positive-sense single stranded RNA virus (EMCR-CoV) comprising the sequence of figure 1 or homologues thereof.
- 2. (Withdrawn) An isolated positive-sense single stranded RNA virus (EMCR-CoV) belonging to the Coronaviruses and identifiable as phylogenetically corresponding thereto by determining a nucleic acid sequence of said virus and testing it in phylogenetic tree analyses wherein maximum likelihood trees are generated using 100 bootstraps and 3 jumbles and finding it to be more closely phylogenetically corresponding to a virus isolate having the sequences as depicted in figure 1 than it is corresponding to a virus isolate of PEDV (porcine epidemic diarrhea virus), HCoV-229E (human coronavirus 229E), PRCoV (porcine respiratory coronavirus), TGEV (transmissible gastroenteritis virus), CaCoV (Canine coronavirus) and FeCoV (feline coronavirus).
- 3. (Withdrawn) A virus according to claim 1 wherein said nucleic acid sequence comprises an open reading frame (ORF) encoding a viral protein of said virus.
- 4. (Withdrawn) A virus according to claim 3 wherein said open reading frame is selected from the group of ORFs encoding the viral replicase, nuclear capsid protein, matrix protein and the spike protein.
- 5. (Withdrawn) A virus according to claim 1 isolatable from a human with atypical

pneumonia.

- 6. (Withdrawn) An isolated or recombinant nucleic acid or EMCR-CoV virus-specific functional fragment thereof obtainable from a virus according to claims 1.
- 7. (Withdrawn) A vector comprising a nucleic acid according to claim 6.
- 8. (Withdrawn) A host cell comprising a nucleic acid according to claim 6.
- 9. (Withdrawn) An isolated or recombinant proteinaceous molecule or EMCR-CoV virus-specific functional fragment thereof encoded by a nucleic acid according to claim 6.
- 10. (Withdrawn) An antigen comprising a proteinaceous molecule or EMCR-CoV virus-specific functional fragment thereof according to claim 9.
- 11. (Withdrawn) An antibody specifically directed against an antigen according to claim 10.
- 12. (Previously Presented) The method according to claim 48 comprising reacting said viral isolate or a component thereof with an antibody directed against a proteinaceous molecule encoded by a nucleic acid of an EMCR-CoV virus.
- 13. (Cancelled)

14.	(Cancelled)		
15.	(Withdrawn)	A method for serologically diagnosing an EMCR-CoV infection of a	
mai	nmal comprising o	determining in a sample of said mammal the presence of an antibody	
spe	cifically directed a	gainst an EMCR-CoV virus or component thereof by reacting said	
sample with a proteinaceous molecule or fragment thereof according to claim 9.			
16.	(Withdrawn)	A diagnostic kit for diagnosing an EMCR-CoV infection comprising a	
virus according claim 1.			
17	(Cancelled)		
17.	(Cancenda)		
18.	(Cancelled)		
19.	(Cancelled)		
20.	(Withdrawn)	A pharmaceutical composition comprising a virus according to claim	
1.			
	(Withdrawn)	A method for the treatment or prevention of an EMCR-CoV virus	
infection comprising providing an individual with a pharmaceutical composition according to			
clai	m 20.		

- 22. (Withdrawn) A method for the treatment or prevention of atypical pneumonia comprising providing an individual with a pharmaceutical composition according to claim 20.
- 23. (Withdrawn) A viral replicase encoded by an RNA sequence comprising the indicated sequences, or homologues thereof as depicted in figure 1.
- 24. (Withdrawn) A viral spike protein comprising the indicated amino acid sequence as depicted in figure 1, or a homologue thereof.
- 25. (Withdrawn) A viral nuclear capsid protein encoded by an RNA sequence comprising the indicated sequence as depicted in figure 1 or a homologue thereof.
- 26. (Withdrawn) A viral nsp 3 or envelope protein encoded by an RNA sequence comprising the indicated sequence as depicted in figure 1, or a homologue thereof.
- 27. (Withdrawn) A nucleic acid sequence which comprises one or more of the sequences coding for separate viral proteins as depicted in figure 1 or a nucleic acid sequence which can hybridise with any of these sequences under stringent conditions.
- 28. (Withdrawn) A host cell comprising a vector according to claim 7.
- 29. (Withdrawn) A method for virologically diagnosing an EMCR-CoV infection of a mammal comprising determining in a sample of said mammal the presence of a viral isolate

or component thereby by reacting said sample with an antibody according to claim 11.

- 30. (Withdrawn) A method for serologically diagnosing an EMCR-CoV infection of a mammal comprising determining in a sample of said mammal the presence of an antibody specifically directed against an EMCR-CoV virus or component thereof by reacting said sample with an antigen according to claim 10.
- 31. (Withdrawn) A diagnostic kit for diagnosing an EMCR-CoV infection comprising a nucleic acid according to claim 6.
- 32. (Withdrawn) A diagnostic kit for diagnosing an EMCR-CoV infection comprising a proteinaceous molecule or fragment thereof according to claim 9.
- 33. (Withdrawn) A diagnostic kit for diagnosing an EMCR-CoV infection comprising an antigen according to claim 10.
- 34. (Withdrawn) A diagnostic kit for diagnosing an EMCR-CoV infection comprising an antibody according to claim 11.
- 35. (Cancelled)
- 36. (Cancelled)

37. (Cancelled)	
38. (Cancelled)	
39. (Cancelled)	
40. (Cancelled)	
41. (Withdrawn) claim 6.	A pharmaceutical composition comprising a nucleic acid according to
42. (Withdrawn) 7.	A pharmaceutical composition comprising a vector according to claim
43. (Withdrawn) claim 8.	A pharmaceutical composition comprising a host cell according to
44. (Withdrawn) fragment thereof acco	A pharmaceutical composition comprising a proteinaceous molecule or ording to claim 9.
45. (Withdrawn) claim 10.	A pharmaceutical composition comprising an antigen according to

- 46. (Withdrawn) A pharmaceutical composition comprising an antibody according to claim 11.
- 47. (Currently Amended) A method for <u>determining whether a viral isolate is analyzing a sample comprising detecting the presence or absence of an EMCR-CoV virus in the sample comprising detecting whether the viral isolate more closely phylogenetically corresponds to SEQ ID NO: 1 or a functional fragment thereof than it does to a viral isolate from a different coronavirus selected from the group consisting of porcine epidemic diarrhea virus (PEDV)), human corona virus 229E (HcoV-229E), porcine respiratory coronavirus (PRCoV), transmissible gastroenteritis virus (TGEV), canine coronavirus (CaCoV) and feline coronavirus (FeCoV).</u>
- 48. (Cancelled)
- 49. (Previously Presented) The method according to claim 47, wherein the detecting comprises (a) contacting the sample with a nucleic acid primer or probe that is specific for the EMCR-CoV virus or a functional fragment thereof under conditions that would cause a reaction if and only if an EMCR-CoV viral isolate were present, and (b) determining the presence or absence of the reaction.
- 50. (Previously Presented) The method according to claim 49, wherein the functional fragment comprises an open reading frame that encodes a protein of the EMCR-CoV virus selected from the group consisting of a viral replicase, nuclear capsid protein, matrix protein

and spike protein.

- 51. (Previously Presented) The method according to claim 49, wherein the nucleic acid primer or probe has at least 65% complementarity to RNA of the EMCR-CoV virus or the functional fragment thereof.
- 52. (Previously Presented) The method according to claim 49, wherein the nucleic acid primer or probe has at least 80% complementarity to RNA of the EMCR-CoV virus or the functional fragment thereof.
- 53. (Currently Amended) The method according to claim <u>47</u> <del>48</del>, wherein the detecting comprises reacting the sample with a nucleic acid probe under stringency conditions wherein the probe hybridizes with the EMCR-CoV virus or the functional fragment thereof without hybridizing to the different coronavirus.
- 54. (Previously Presented) The method according to claim <u>47</u> <del>48</del>, wherein the detecting comprises sequencing a nucleic acid in the sample, and determining whether a sequence of the sequenced nucleic acid is an EMCR-CoV virus sequence by ascertaining whether the sequence more closely phylogenetically corresponds to SEQ ID NO. 1 or the functional fragment thereof than it does to a sequence of the different coronavirus.
- 55. (Previously Presented) The method according to claim <u>47</u> <del>48</del>, wherein the sample is isolated from a mammal.

- 56. (Previously Presented) The method according to claim 55, wherein the method comprises diagnosing an EMCR-CoV infection of the mammal based on the identifying.
- 57. (Previously Presented) The method according to claim 55, wherein the mammal is a human with atypical pneumonia.